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PENSOFT

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Two new species and three new records of the cobweb spider *Platnickina* (Araneae, Theridiidae) from Sumatra

Naufal Urfi Dhiya'ulhaq[1,2], Damayanti Buchori[3,4], Purnama Hidayat[3], Stefan Scheu[1,5], Jochen Drescher[1,6]

1 *Animal Ecology, J.F. Blumenbach Institute of Zoology and Anthropology, University of Göttingen, Göttingen, Germany*
2 *Species Obscura, Depok, Indonesia*
3 *Department of Plant Protection, Faculty of Agriculture, IPB University, Bogor, Indonesia*
4 *Centre for Transdisciplinary and Sustainability Sciences, IPB University, Bogor, Indonesia*
5 *Centre of Biodiversity and Sustainable Land Use, University of Göttingen, Göttingen, Germany*
6 *Senckenberg Museum for Natural Sciences Görlitz, Görlitz, Germany*

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Corresponding author: Jochen Drescher (jdresch@gwdg.de)

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Abstract

Two new species of spiders of the genus *Platnickina* Koçak & Kemal, 2008 are described from Sumatra, Indonesia: *Platnickina harapan* Dhiya'ulhaq, **sp. nov.** (♂♀) and *Platnickina debu* Dhiya'ulhaq, **sp. nov.** (♂♀). Three species are recorded for the first time from Indonesia: *Platnickina adamsoni* (Berland, 1934), *Platnickina fritilla* Gao & Li, 2014, and *Platnickina xianfengensis* (Zhu & Song, 1992). Detailed diagnoses, descriptions and high-quality photographs are provided for the newly recorded species.

Key Words

Arachnida, biodiversity, taxonomy, Southeast Asia, Indonesia

Introduction

The spider genus *Platnickina* Koçak & Kemal, 2008 was first recognized as a distinct group by Levi (1957), who referred to it as the *tinctum*-group within the genus *Theridion* Walckenaer, 1805, citing the exposed embolus base as a key character. Yoshida (2001) erected the genus *Keijia* Yoshida, 2001 to accommodate this group, but it was later discovered to be preoccupied by a crustacean genus described by Manning (1995) and was given the name *Platnickina* as a replacement (Koçak and Kemal 2008). Huang et al. (2025) divided the genus into three species groups based on their genitalic morphology: *antoni*-group, *maculata*-group, and *sterninotata*-group.

Platnickina contains 11 species worldwide (World Spider Catalog 2025), including the cosmopolitan *Platnickina adamsoni* (Berland, 1934). No species have been recorded from Indonesia, although four species are known from the Indomalayan region: *P. adamsoni* *P. fritilla* Gao & Li, 2014, *P. qionghaiensis* (Zhu, 1998) and *P. yoshidai* Hu & Liu, 2025.

While examining the spiders collected from the EF-FoRTs project (Drescher et al. 2016) in Jambi, Sumatra, we identified five species belonging to *Platnickina*, which included two undescribed ones. This study aims to provide full descriptions of these two species, including high-quality images and diagnostic drawings. Additionally, we provide new records for *P. adamsoni*, *P. fritilla*, and *P. xianfengensis* (Zhu & Song, 1992), recently transferred from Theridion (Huang et al. 2025). This represents the first published records of *Platnickina* in Indonesia.

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Materials and methods

The specimens used here were part of a collection of more than half a million canopy arthropods (Pollierer et al. 2023), from 32 permanent research plots of the EFForTS project sampled in 2013 (Drescher et al. 2016). Research plots were evenly distributed among four land-use systems: Lowland rainforest, "jungle rubber" (extensively managed rubber agroforestry), and smallholder monoculture plantations of rubber (*Hevea brasiliensis* (Willd. ex A.Juss.) Müll.Arg.) and oil palm (*Elaeis guineensis* Jacq.). More details can be found in Drescher et al. (2016) concerning plot design and the EFForTS research framework, Pollierer et al. (2023) regarding the canopy fogging method, Ramos et al. (2022) with regard to biodiversity patterns of the collected canopy spider community, and Dhiya'ulhaq et al. (2024) as well as ecotaxonomy.org for images of our morphospecies collection.

Specimens were examined under a ZEISS Stemi 2000 microscope. The style of species descriptions follows Gao and Li (2014). Female genitalia were excised from the specimen's body and then cleared with 10% KOH for at least one hour in order to examine the internal copulatory organs. Imaging of the specimens was done using a Keyence VHX–7000 digital microscope system. Description of coloration is based on specimens in ethanol. Measurements of legs are given as total length (femur, patella, tibia, metatarsus, tarsus). Missing legs or leg segments are marked with "–", and legs with missing segments do not have their total length recorded. All measurements are in millimeters.

Abbreviations

AER anterior eye row;
ALE anterior lateral eyes;
AME anterior median eyes;
PER posterior eye row;
PLE posterior lateral eyes;
PME posterior median eyes;
TTA theridiid tegular apophysis.

Repositories

GOET Johann Friedrich Blumenbach Institute of Zoology and Anthropology, University of Göttingen, Göttingen, Germany
MZB Museum Zoologicum Bogoriense, Bogor, Indonesia
SMF Naturmuseum Senckenberg, Frankfurt am Main, Germany
ZMH Zoologisches Museum Hamburg, Hamburg, Germany

Results

Order Araneae Clerck, 1757
Family Theridiidae Sundevall, 1833

Platnickina Koçak & Kemal, 2008

Type species. *Keijia maculata* Yoshida, 2001.

Diagnosis and description. See Yoshida (2001). For the diagnoses of each species group, see Huang et al. (2025).

Platnickina adamsoni (Berland, 1934)

Figs 1–3

Theridion adamsoni: Berland 1934: 102, figs 6–9 (♀); Levi 1959: 111 (synonym of *Theridion hobbsi*); Marples 1964: 409, fig. 11 (♂); Levi 1967: 181, figs 20–23 (♂♀); Kumada 1986: 2, figs 1–8 (♂♀); Chikuni 1989: 43, fig. 61 (♂♀); Saito 1992: 946, fig. 6 (♀); Zhu 1998: 162, fig. 101A–E (♂♀); Song, Zhu and Chen 1999: 137, fig. 71G–H, M–N (♂♀); Namkung 2002: 99 (♂♀).

Coleosoma adamsoni: Saaristo 1978: 117, figs 183–191 (♂♀).

Platnickina adamsoni: Ono 2011: 452, figs 56–61 (♂♀); Sherwood and Sharp 2023: 356, fig. 1a–d (♂♀).

Theridion hobbsi: Gertsch & Archer, 1942: 5, fig. 6 (♀); Archer 1946: 46 (synonym of *Theridion blatcheyii*); Levi 1957: 62, figs 198–199, 209, 213–214 (♂♀, synonym of *Chindellum magnificum* and *Theridion insulicola*).

Theridion blatchleyii: Bryant 1945: 205, fig. 5 (♂).

Theridion insulicola: Bryant 1947: 88, fig. 1 (♀).

Chindellum magnificum: Archer, 1950: 13, pl. I, fig. 2 (♂♀).

Keijia mneon [misidentifications]: Yoshida 2001: 172, figs 8, 53–55 (♂♀); Namkung 2003: 101 (♂♀); Yoshida 2003: 84, figs 213–215 (♂♀); Saaristo 2006: 62, figs 34–42 (♂♀); Yoshida 2009: 374, figs 171, 172 (♂♀); Yin et al. 2012: 352, fig. 144a–c (♀).

Platnickina mneon [misidentifications]: Saaristo 2010: 257, fig. 37, 75–80 (♂♀); Jin 2018: 29, fig. 4-19.A–C, pl. 7 (♀); Suzuki and Nakama 2021: 32, figs 1, 5 (♂); Dippenaar-Schoeman et al. 2021: 65 (♂♀); Baert et al. 2023: 32, fig. 121A–C (♂♀).

Material examined. INDONESIA – Jambi Province • 1 ♂; Batang Hari, Bajubang, Singkawang; 01°47'13.8"S, 103°16'14.7"E; elev. 46 m; 18 Jul. 2013; J. Drescher leg.; canopy fogging in oil palm plantation; GOET 2013_HO4.3_AraTrid020N_001 (to be transferred to MZB). • 1 ♂; Batang Hari, Bajubang, Bungku; 01°55'41.6"S, 103°15'34.2"E; elev. 48 m; 5 Jul. 2013; J. Drescher leg.; canopy fogging in jungle rubber plantation; GOET 2013_HJ1.2_AraTrid020N_001 (to be transferred to ZMH). • 1 ♀; Sarolangun, Bukit Duabelas National Park; 01°56'30.8"S, 102°34'50.6"E; elev. 91 m; 4 Oct. 2013; J. Drescher leg.; canopy fogging in rainforest; GOET 2013_BF4.1_AraTrid020N_001 (to be transferred to MZB).

Diagnosis. Among the *sterninotata*-group, males of *P. adamsoni* are most similar to *P. yoshidai* by the

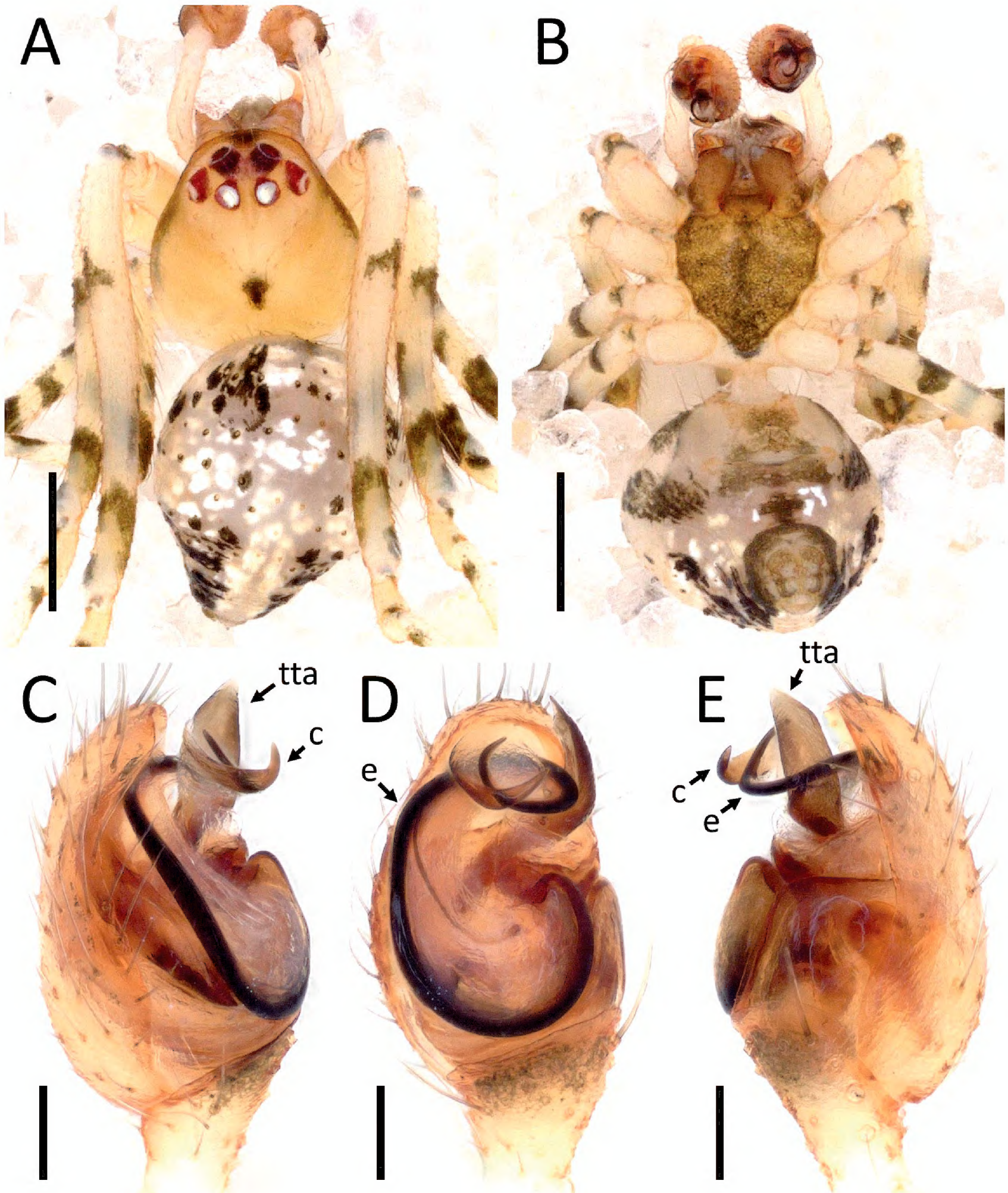

Figure 1. *Platnickina adamsoni* (Berland, 1934), male (2013_HO4.3_AraTrid020N_001). **A, B.** Habitus. **A.** Dorsal view; **B.** Ventral view; **C–E.** Left palp; **C.** Prolateral view; **D.** Ventral view; **E.** Retrolateral view. Scale bars: 0.5 mm (**A, B**); 0.1 mm (**C–E**).

conductor extending into a pointed, sclerotised distal part (Figs 1C, D, 3A, B) but can be distinguished by shorter embolus, not coiled at the tip (vs longer, tip with horizontal coiling in *P. yoshidai*) (Huang et al. 2025: fig. 10A–C). Females are most similar to *P. harapan* sp. nov. by the inflated, sclerotised distal part of copulatory ducts but can be distinguished by the rectangular initial part of copulatory ducts (Figs 2C, D, 3C, D) (vs copulatory ducts arc-shaped in *P. harapan* Dhiya'ulhaq, sp. nov.) (Figs 11C, D, 12C, D).

Description. Male (2013_HO4.3_AraTrid020N_001; Figs 1, 3A, B). Total length 1.83. Prosoma length 0.79; width 0.74. Opisthosoma length 1.04; width 0.89. Diameter of eyes: AME 0.11; ALE 0.08; PLE 0.08; PME 0.09. Interdistances between eyes: AME–AME 0.09; AME–ALE 0.02; ALE–ALE 0.30; PME–PME 0.06; PME–PLE 0.06; ALE–PLE 0.01; AME–PME 0.09; PLE–PLE 0.36. Leg measurements: leg I 5.18 (1.62, 0.31, 1.51, 1.32, 0.42); leg II (1.30, 0.30, 1.08, 1.05, –); leg III 2.77 (0.89, 0.26, 0.52, 0.74, 0.36); leg IV 2.76 (0.91, 0.24, 0.56, 0.72, 0.33).

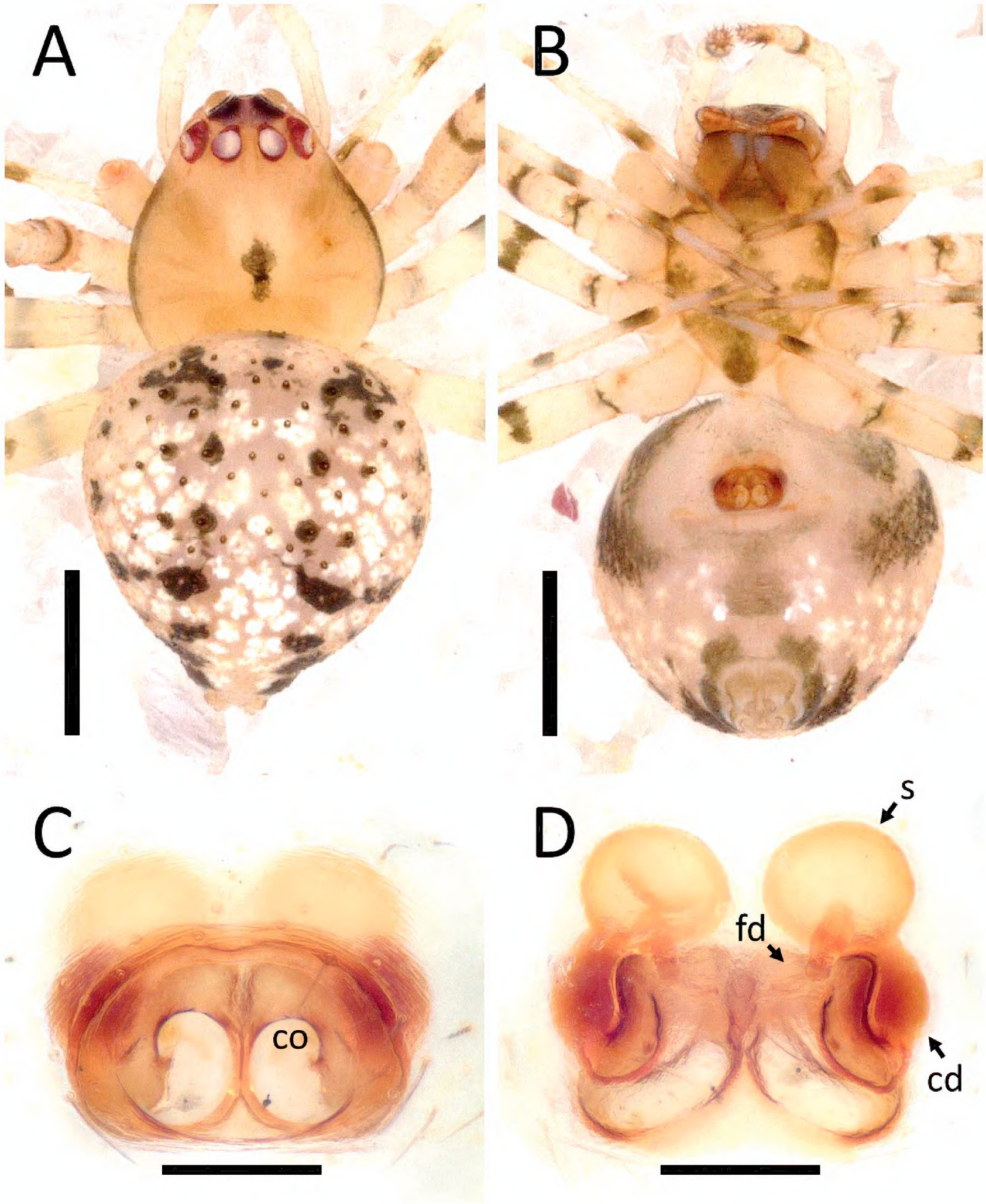

Figure 2. *Platnickina adamsoni* (Berland, 1934), female (2013_BF4.1_AraTrid020N_001). **A, B.** Habitus; **A.** Dorsal view; **B.** Ventral view; **C, D.** Epigynum, cleared; **C.** Ventral view; **D.** Dorsal view. Scale bars: 0.5 mm (**A, B**); 0.1 mm (**C, D**).

Prosoma pear-shaped, brownish yellow; dorsally with an elongated black mark; margins black (Fig. 1A). Eyes ringed in red; AME larger than the other eyes; AER strongly recurved; PER straight (Fig. 1A). Chelicerae brown. Maxillae brown (Fig. 1B). Labium fused with sternum, brown (Fig. 1B). Sternum triangular, brown (Fig. 1B). Opisthosoma egg-shaped, conspicuously tuberculate, pinkish-yellow with mottled black and white spots; distal end with larger black patches (Fig. 1A). Legs yellow, with numerous distinct black patches (Fig. 1A). Spinnerets brown (Fig. 1B).

Palp (Figs 1C–E, 3A, B): Cymbium oval, yellow. Conductor membranous, twisted; middle part widened; tip claw-shaped, acute. TTA rhomboid; base curved. Embolus curved, wide, covering most of the bulb's ventral surface; membranous, except for the distinctly dark outer margin; tip ventrally protruding, resting on the widened part of conductor.

Female (2013_BF4.1_AraTrid020N_001; Figs 2, 3C, D). Total length 1.96. Prosoma length 0.82; width 0.77. Opisthosoma length 1.14; width 1.05. Diameter of eyes: AME 0.10; ALE 0.07; PLE 0.08; PME 0.09. Interdistances

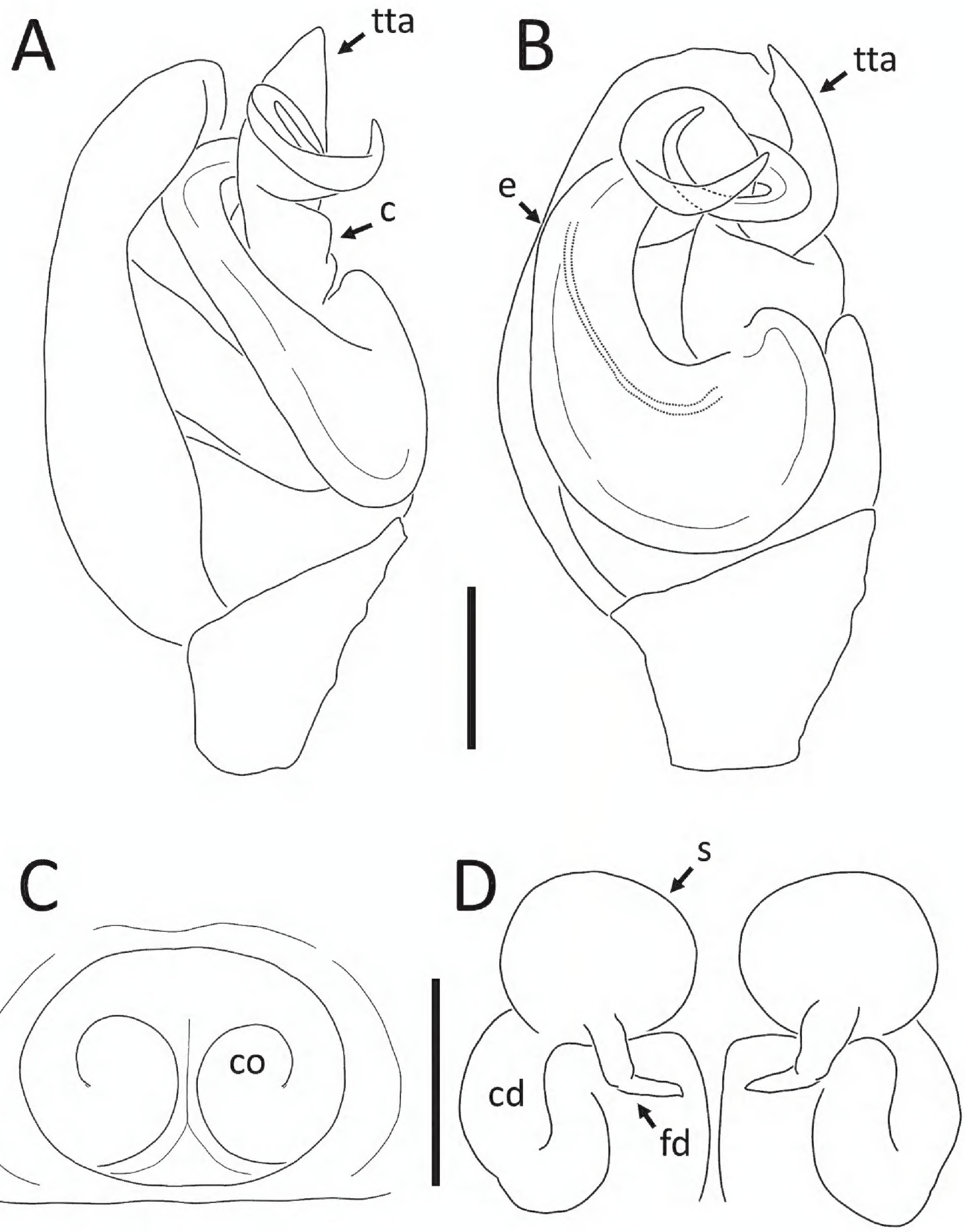

Figure 3. *Platnickina adamsoni* (Berland, 1934). **A, B.** Male (2013_HO4.3_AraTrid020N_001), left palp; **A.** Prolateral view; **B.** Ventral view; **C, D.** Female (2013_BF4.1_AraTrid020N_001), epigynum; **C.** Ventral view; **D.** Dorsal view. Abbreviations: c = conductor; cd = copulatory duct; co = copulatory opening; e = embolus; fd = fertilization duct; tta = theridiid tegular apophysis; s = spermatheca. Scale bars: 0.1 mm.

between eyes: AME–AME 0.08; AME–ALE 0.02; ALE–ALE 0.27; PME–PME 0.05; PME–PLE 0.04; ALE–PLE 0.01; AME–PME 0.07; PLE–PLE 0.33. Leg measurements: leg I –; leg II 3.76 (1.22, 0.31, 0.92, 0.91, 0.40); leg III 2.91 (0.93, 0.24, 0.59, 0.74, 0.41); leg IV 2.93 (0.93, 0.28, 0.58, 0.75, 0.39). Habitus as in males, except sternum brownish yellow with black edges (Fig. 2B).

Epigynum (Figs 2C, D, 3C, D): Atrium large, oval. Copulatory openings semicircular. Copulatory ducts boxy S-shaped; initial part with angled corners, forming a rectangular U-turn; latter part inflated and darkened. Spermathecae oval. Fertilization ducts curved.

Distribution. Cosmopolitan. Newly recorded for Indonesia (Fig. 15).

Remarks. This species appears to have been introduced to several countries, but its actual region of origin has not been investigated, and its true native distribution (particularly whether it includes Indonesia) remains uncertain. Levi (1967) remarked that it is likely introduced to the Americas given the apparent lack of closely related species in the region. The fact that the other species of the *sterninotata*-group are found in Asia (including *P. harapan* Dhiya'ulhaq, sp. nov.) might be an indication for this region to be the native distribution of *P. adamsoni*.

Platnickina debu Dhiya'ulhaq, sp. nov.

https://zoobank.org/93A96863-9155-477E-B583-4BD0304DA2F9

Figs 4–6

Type material. ***Holotype.*** INDONESIA - Jambi Province • ♂; Batang Hari, Bajubang, Pompa Air; 01°52'44.6"S, 103°16'28.4"E; elev. 68 m; 18 Aug. 2013; J. Drescher leg.; canopy fogging in rubber plantation; GOET 2013_HR2.1_AraTrid185N_001 (to be transferred to MZB). ***Paratypes.*** INDONESIA - Jambi Province • 1 ♀; Batang Hari, Bajubang, Sungkai; 01°50'58.7"S, 103°18'00.5"E; elev. 56 m; 28 Jul. 2013; J. Drescher leg.; canopy fogging in jungle rubber plantation; GOET 2013_HJ3.2_AraTrid185N_001 (to be transferred to MZB).

Diagnosis. This species belongs to the *maculata*-group based on the cow-horn-shaped embolus, wide TTA, and slightly curved copulatory ducts. Among this species group, males of *P. debu* Dhiya'ulhaq, sp. nov. are most similar to *P. maculata* (Yoshida, 2001) by the notched conductor with a triangular protrusion in the middle, but can be distinguished by the obtuse tip of conductor (Fig. 4D, 6A, B) (vs sharp, hook-like in *P. maculata*) (Yoshida 2001: fig. 48). Females are most similar to *P. xianfengensis* by the slightly bent copulatory ducts but can be distinguished by the atrium distinctly smaller than spermathecae (Figs 5C, D, 6C, D) (vs atrium slightly larger than spermathecae in *P. xianfengensis*) (Zhu 1998, fig. 95B, C).

Description. Male (holotype 2013_HR2.1_AraTrid185N_001; Figs 4, 6A, B). Total length 1.93. Prosoma length 0.96; width 0.81. Opisthosoma length 0.97; width 0.93. Diameter of eyes: AME 0.11; ALE 0.07; PLE 0.07; PME 0.09. Interdistances between eyes: AME–AME 0.08; AME–ALE 0.02; ALE–ALE 0.30; PME–PME 0.07; PME–PLE 0.06; ALE–PLE 0.00; AME–PME 0.09; PLE–PLE 0.35. Leg measurements: leg I 5.36 (1.77, 0.32, 1.60, 1.27, 0.40); leg II 4.29 (1.41, 0.28, 1.21, 1.01, 0.38); leg III 2.56 (0.83, 0.21, 0.50, 0.71, 0.31); leg IV 2.84 (0.93, 0.21, 0.58, 0.78, 0.34). Prosoma pear-shaped, light-brown; dorsally with an elongated black mark (Fig. 4A). Eyes ringed in red; AME the largest; AER strongly recurved; PER slightly procurved (Fig. 4A). Chelicerae brown. Maxillae brown (Fig. 4B). Labium fused with sternum, brown (Fig. 4B). Sternum triangular, light-brown with black markings on the margins and in the middle (Fig. 4B). Opisthosoma round, conspicuously tuberculate, yellowish grey with mottled black and white (guanine) spots; dorsally with additional three pairs of large black spots, forming two longitudinal rows (Fig. 4A). Legs light brown, with numerous distinct black patches (Fig. 4A). Spinnerets brown. (Fig. 4B)

Palp (Figs 4C–E, 6A, B): Cymbium oval, brown. Conductor membranous, curved with a triangular protrusion in the middle; tip obtuse. TTA conical with a wide base; tip acute, slightly curved. Embolus curved, claw-shaped, approximately half the length of bulb; membranous, except for the distinctly dark outer margin.

Female (paratype 2013_HJ3.2_AraTrid185N_001; Figs 4, 6C, D). Total length 2.56. prosoma length 0.86; width 0.84. Opisthosoma length 1.70; width 1.70. Diameter of eyes: AME 0.10; ALE 0.06; PLE 0.06; PME 0.09. Interdistances between eyes: AME–AME 0.08; AME–ALE 0.03; ALE–ALE 0.29; PME–PME 0.05; PME–PLE 0.05; ALE–PLE 0.00; AME–PME 0.07; PLE–PLE 0.32. Leg measurements: leg I 4.62 (1.45, 0.32, 1.33, 1.11, 0.41); leg II 3.98 (1.32, 0.24, 1.10, 0.93, 0.39); leg III 2.62 (0.81, 0.21, 0.50, 0.74, 0.36); leg IV 2.88 (0.87, 0.26, 0.59, 0.81, 0.35). Habitus as in males, with much larger opisthosoma (Fig. 5A, B).

Epigynum (Figs 5C, D, 6C, D): Atrium small, circular. Copulatory openings semicircular. Copulatory ducts lightly curved. Spermathecae oval. Fertilization ducts hook-shaped.

Etymology. The specific epithet is an Indonesian word meaning "dust", referring to the dark specks on the opisthosoma of this species. Noun in apposition.

Distribution. Indonesia (Sumatra: Jambi) (Fig. 15).

Platnickina fritilla Gao & Li, 2014

Figs 7, 8

Platnickina fritilla: Gao & Li, 2014: figs 77, figs 61–64.

Material examined. INDONESIA – Jambi Province • 1 ♂; Batang Hari, Hutan Harapan Conservation Area; 02°10'42.4"S, 103°19'58.2"E; elev. 54 m; 3 Aug. 2013; J. Drescher leg.; canopy fogging in rainforest; GOET 2013_HF3.2_AraTrid180N_001 (to be transferred to MZB). • 1 ♂; Batang Hari, Hutan Harapan Conservation Area; 02°09'48.9"S, 103°20'04.4"E; elev. 73 m; 18 Jul. 2013; J. Drescher leg.; canopy fogging in rainforest; GOET 2013_HF2.1_AraTrid180N_001 (to be transferred to ZMH). • 1 ♂; Sarolangun, Air Hitam, Desa Baru; 02°00'56.8"S, 102°45'12.6"E; elev. 64 m; 14 Jul. 2013; J. Drescher leg.; canopy fogging in jungle rubber plantation; GOET 2013_BJ4.1_AraTrid180N_001 (to be transferred to SMF).

Diagnosis. Males are distinguished from all other congeners by the TTA having a denticulate tip with acute protrusion (Figs 7D, E, 8B; Gao and Li 2014, figs 62A, B, 64A, B). Females are distinguished from all other congeners by the short copulatory ducts (half the length of spermathecae) and small, square-shaped atrium (Gao and Li 2014: figs 61 C, D, 63A, B).

Description. Male (2013_HF3.2_AraTrid180N_001; Figs 7, 8). Total length 1.60. Prosoma length 0.73; width 0.62. Opisthosoma length 0.87; width 0.58. Diameter of eyes: AME 0.10; ALE 0.07; PLE 0.08; PME 0.09. Interdistances between eyes: AME–AME 0.05; AME–ALE 0.02; ALE–ALE 0.23; PME–PME 0.07; PME–PLE 0.06; ALE–PLE 0.00; AME–PME 0.08; PLE–PLE 0.30. Leg measurements: leg I 6.32 (2.20, 0.24, 2.11, 1.34, 0.43); leg II 4.13 (1.45, 0.21, 1.26, 0.85, 0.36); leg III 2.27 (0.80, 0.13, 0.52, 0.52, 0.30); leg IV 2.96 (0.99, 0.19, 0.74, 0.70, 0.34). Prosoma pear-shaped, brown; dorsally

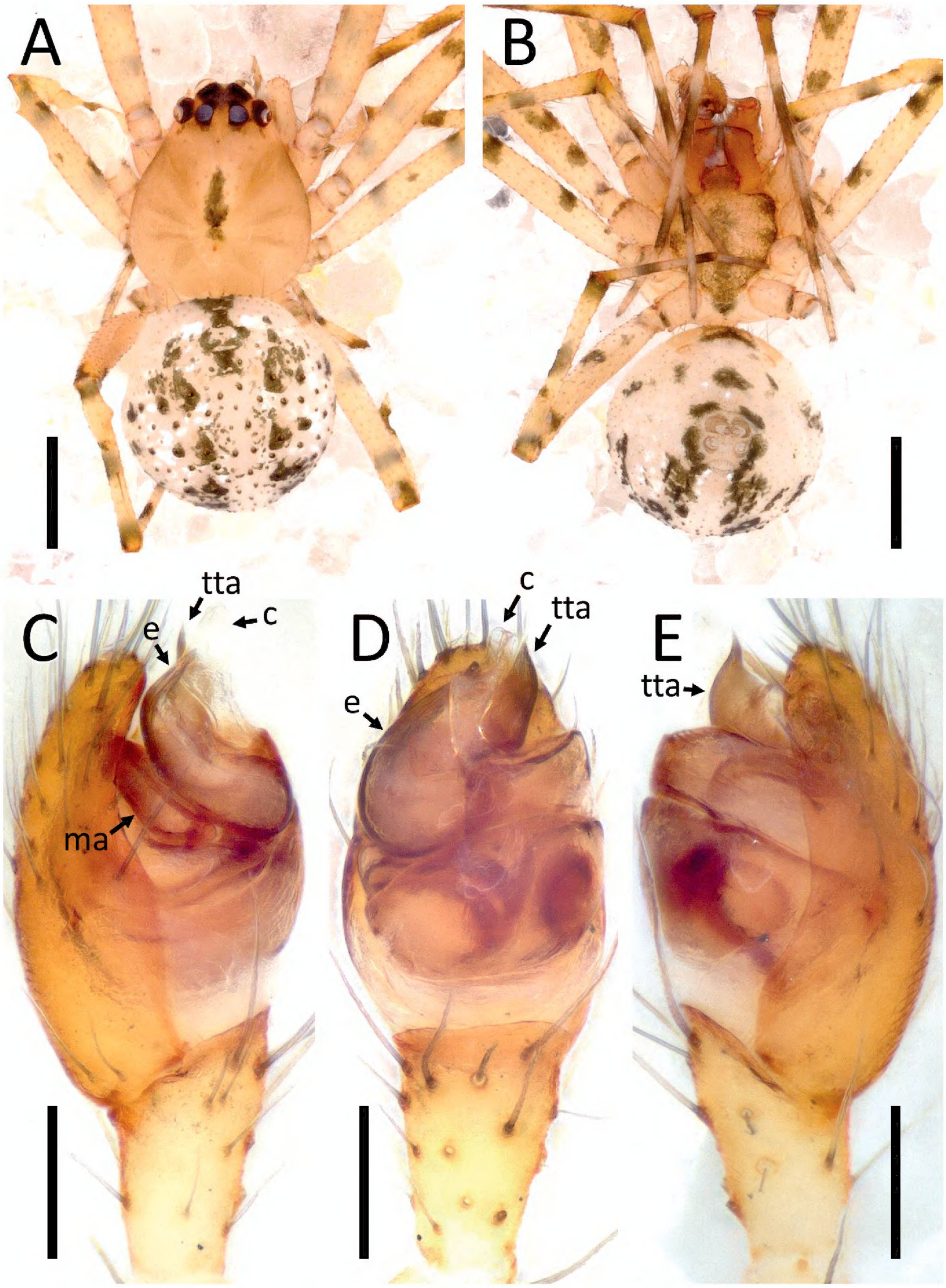

Figure 4. *Platnickina debu* Dhiya'ulhaq, sp. nov., male holotype (2013_HR2.1_AraTrid185N_001). **A, B.** Habitus; **A.** Dorsal view; **B.** Ventral view; **C–E.** Left palp; **C.** Prolateral view; **D.** Ventral view; **E.** Retrolateral view. Scale bars: 0.5 mm (**A, B**); 0.1 mm (**C–E**).

with an elongated black mark (Fig. 7A). Eyes ringed in red; AME larger than the other eyes; AER strongly recurved; PER straight (Fig. 7A). Chelicerae brown. Maxillae brown (Fig. 7B). Labium fused with sternum, brown (Fig. 7B). Sternum triangular, dark brown (Fig. 7B). Opisthosoma oval, conspicuously tuberculate, pinkish yellow with mottled black and white (guanine) spots; dorsally with two longitudinal rows of large black patches (Fig. 7A). Legs light-brown, with numerous faint black patches (Fig. 7A). Spinnerets brown, encircled by a black ring (Fig. 7B).

Palp (Figs 7C–E, 8): Cymbium oval, brown; distally with one thick spine. Conductor membranous, finger-shaped, constricted in the middle, curved. TTA

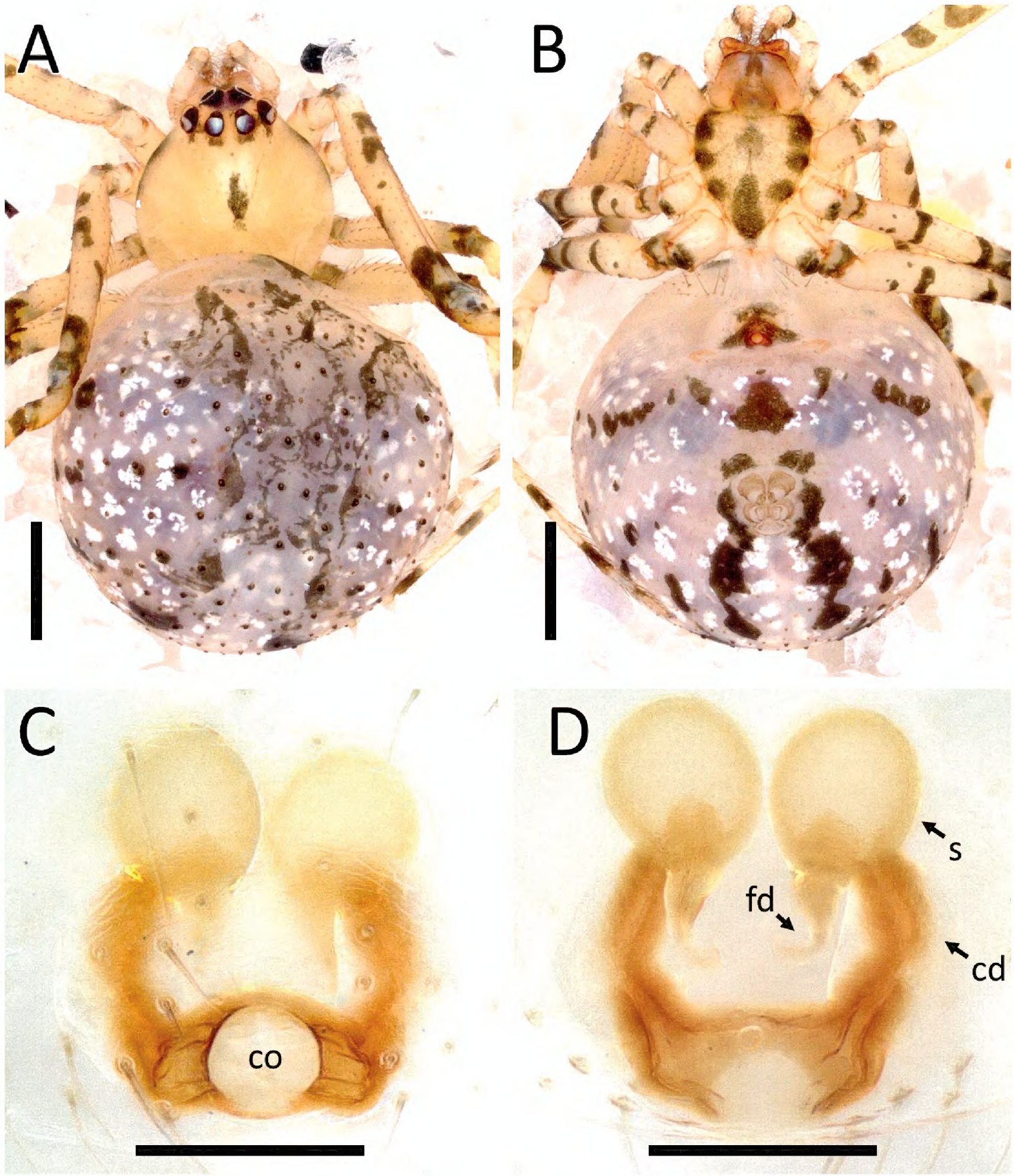

Figure 5. *Platnickina debu* Dhiya'ulhaq, sp. nov., female paratype (2013_HJ3.2_AraTrid185N_001). **A, B.** Habitus; **A.** Dorsal view; **B.** Ventral view; **C, D.** Epigynum, cleared; **C.** Ventral view; **D.** Dorsal view. Scale bars: 0.5 mm (**A, B**); 0.1 mm (**C, D**).

finger-shaped; tip denticled, additionally with an acute protrusion. Embolus membranous, curved, claw-shaped, approximately half the length of bulb.

Distribution. China; Indonesia (Sumatra: Jambi [new record, Fig. 15]).

Platnickina harapan Dhiya'ulhaq, sp. nov.

https://zoobank.org/D357AA0B-713F-4BEA-BA22-FC0C8E78ED69

Figs 9–12

Type material. ***Holotype.*** INDONESIA - Jambi Province • ♀; Batang Hari, Hutan Harapan/Harapan Rainforest; 02°10'42.4"S, 103°19'58.2"E; elev. 54 m; 3 Aug. 2013; J. Drescher leg.; canopy fogging in rainforest; GOET 2013_HF3.1_AraTrid188N_001 (to be transferred to MZB). ***Paratypes.*** INDONESIA - Jambi Province • 1 ♀; Batang Hari, Hutan Harapan/Harapan Rainforest; 02°09'48.9"S, 103°20'04.4"E; elev. 73 m; 6 Jul. 2013; J. Drescher leg.; canopy fogging in rainforest; GOET 2013_HF2.3_AraTrid188N_001 (to be transferred to ZMH). • 1 ♂; Batang Hari, Bajubang, Pompa Air; 01°49'33.3"S, 103°17'38.1"E; elev. 51 m; 14 May 2013; J. Drescher leg.; canopy fogging in jungle rubber plantation; GOET 2013_HJ2.1_AraTrid188N_001 (to be transferred to MZB).

Diagnosis. This species belongs to the *sterninotata*-group based on the membranous retrolateral margin of the embolic base and large copulatory openings on the atrium. Among this group, males of *P. harapan* Dhiya'ulhaq, sp. nov. are most similar to *P. adamsoni* but can be

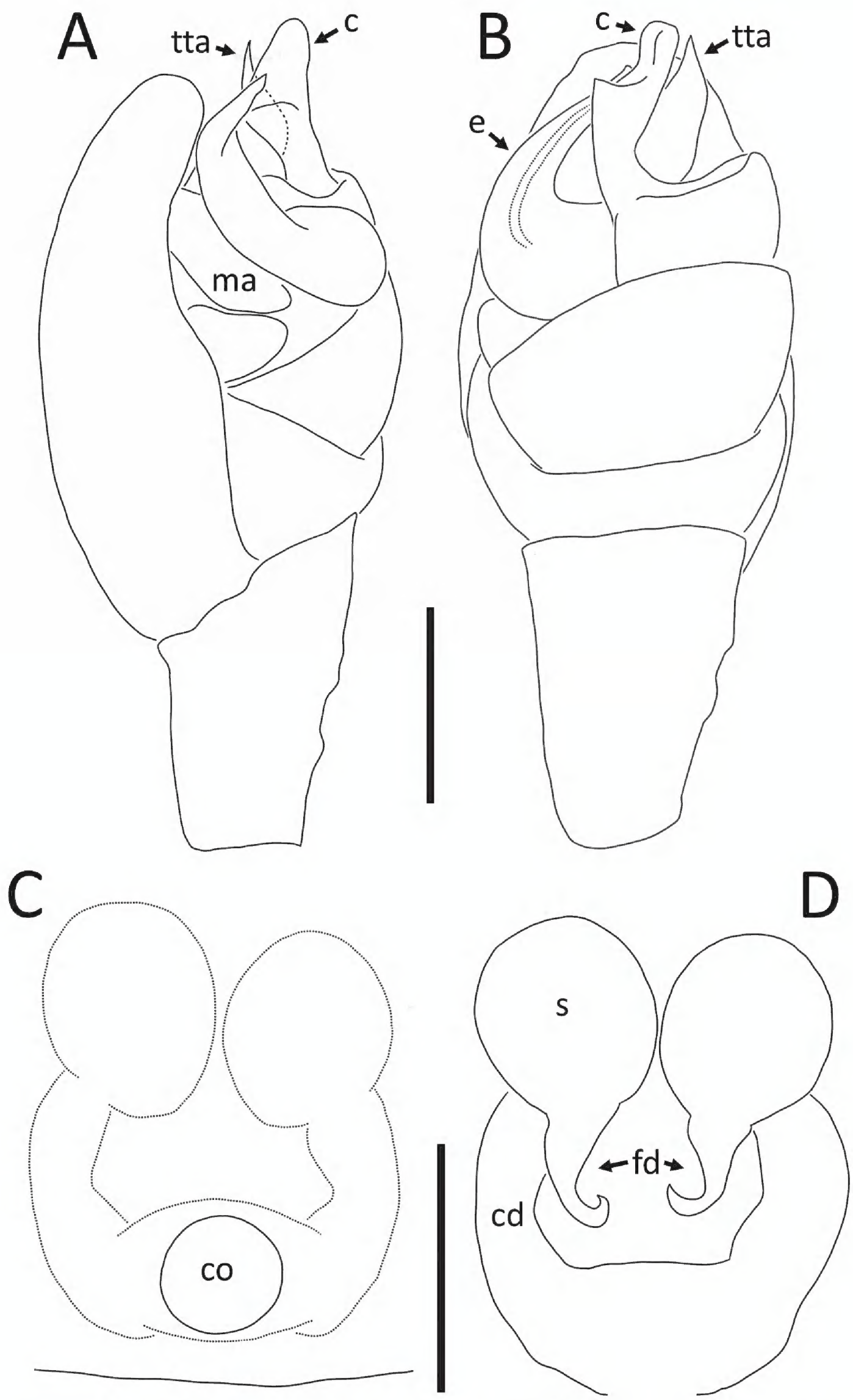

Figure 6. *Platnickina debu* Dhiya'ulhaq, sp. nov. **A, B.** Male holotype (2013_HR2.1_AraTrid185N_001), left palp; **A.** Prolateral view; **B.** Ventral view; **C, D.** Female paratype (2013_HJ3.2_AraTrid185N_001), epigynum; **C.** Ventral view; **D.** Dorsal view. Abbreviations: c = conductor; cd = copulatory duct; co = copulatory opening; e = embolus; fd = fertilization duct; ma = median apophysis; tta = theridiid tegular apophysis; s = spermatheca. Scale bars: 0.1 mm.

distinguished by the spatulate conductor with rounded tip and notched TTA (Figs 10, 12A, B) (vs conductor acute with claw-shaped tip and rhomboid TTA in *P. adamsoni*) (Figs 1C–E, 3A, B). Females are most similar to *P. adamsoni* but can be distinguished by the looser copulatory ducts, barely touching itself, with initial part of copulatory ducts arc-shaped (Figs 11C, D, 12C, D) (vs copulatory ducts tightly packed, always touching itself along its length, with its initial part rectangular in *P. adamsoni*) (Figs 2C, D, 3C, D).

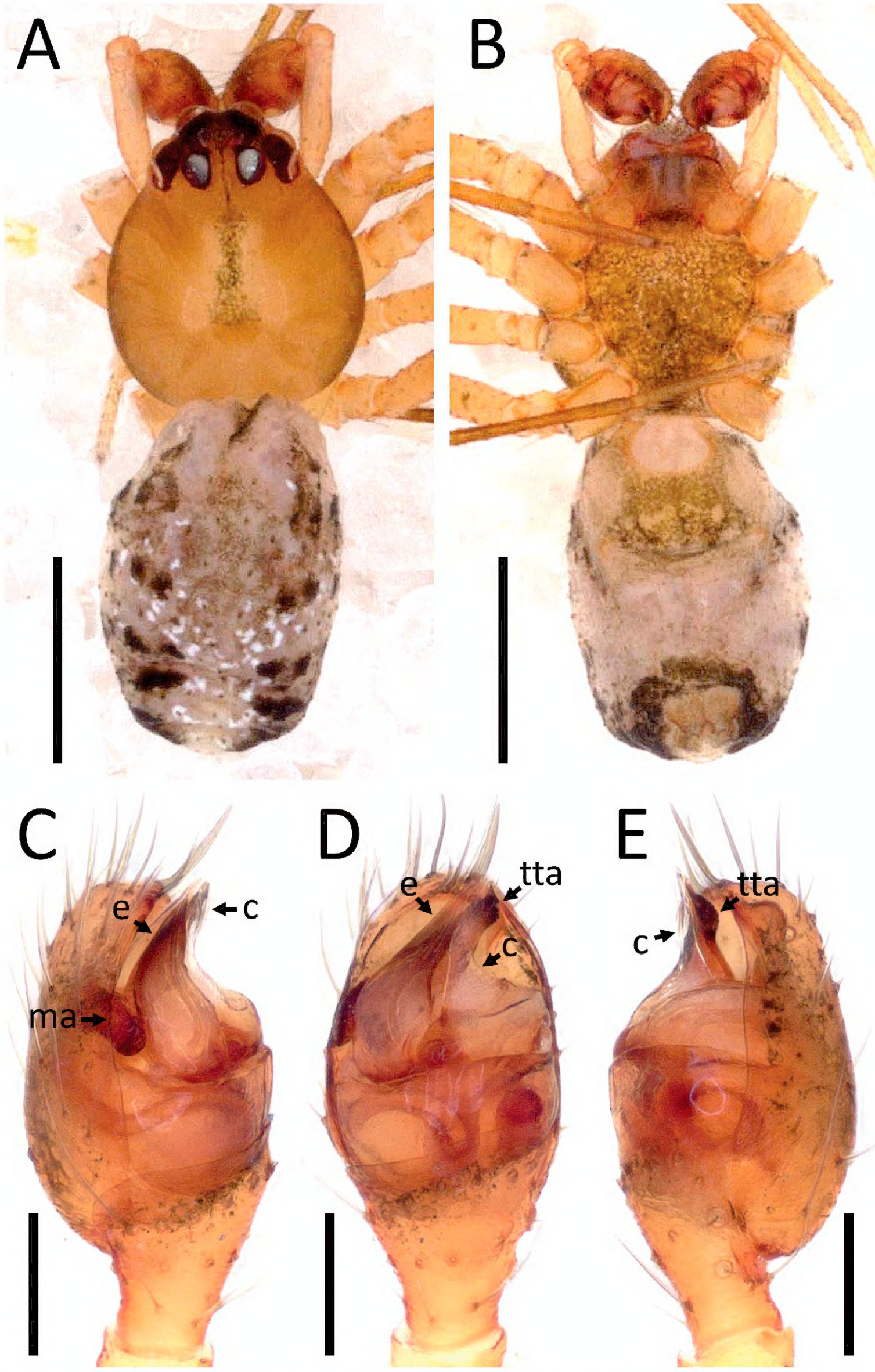

Figure 7. *Platnickina fritilla* Gao & Li, 2014, male (2013_HF3.2_AraTrid180N_001). **A, B.** Habitus; **A.** Dorsal view; **B.** Ventral view; **C–E.** Left palp; **C.** Prolateral view; **D.** Ventral view; **E.** Retrolateral view. Scale bars: 0.5 mm (**A, B**); 0.1 mm (**C–E**).

Description. Male (paratype 2013_HJ2.1_AraTrid188N_001; Figs 9, 10, 12A–C). Total length 1.61. Prosoma length 0.75; width 0.59. Opisthosoma length 0.86; width 0.84. Diameter of eyes: AME 0.10; ALE 0.05; PLE 0.07; PME 0.08. Interdistances between eyes: AME–AME 0.06; AME–ALE 0.02; ALE–ALE 0.24; PME–PME 0.05; PME–PLE 0.03; ALE–PLE 0.01; AME–PME 0.07; PLE–PLE 0.27. Leg measurements: leg I –; leg II 3.73 (1.14, 0.21, 1.17, 0.85, 0.36); leg III 2.30 (0.72, 0.17, 0.52, 0.58, 0.31); leg IV 2.42 (0.66, 0.20, 0.60, 0.62, 0.34).

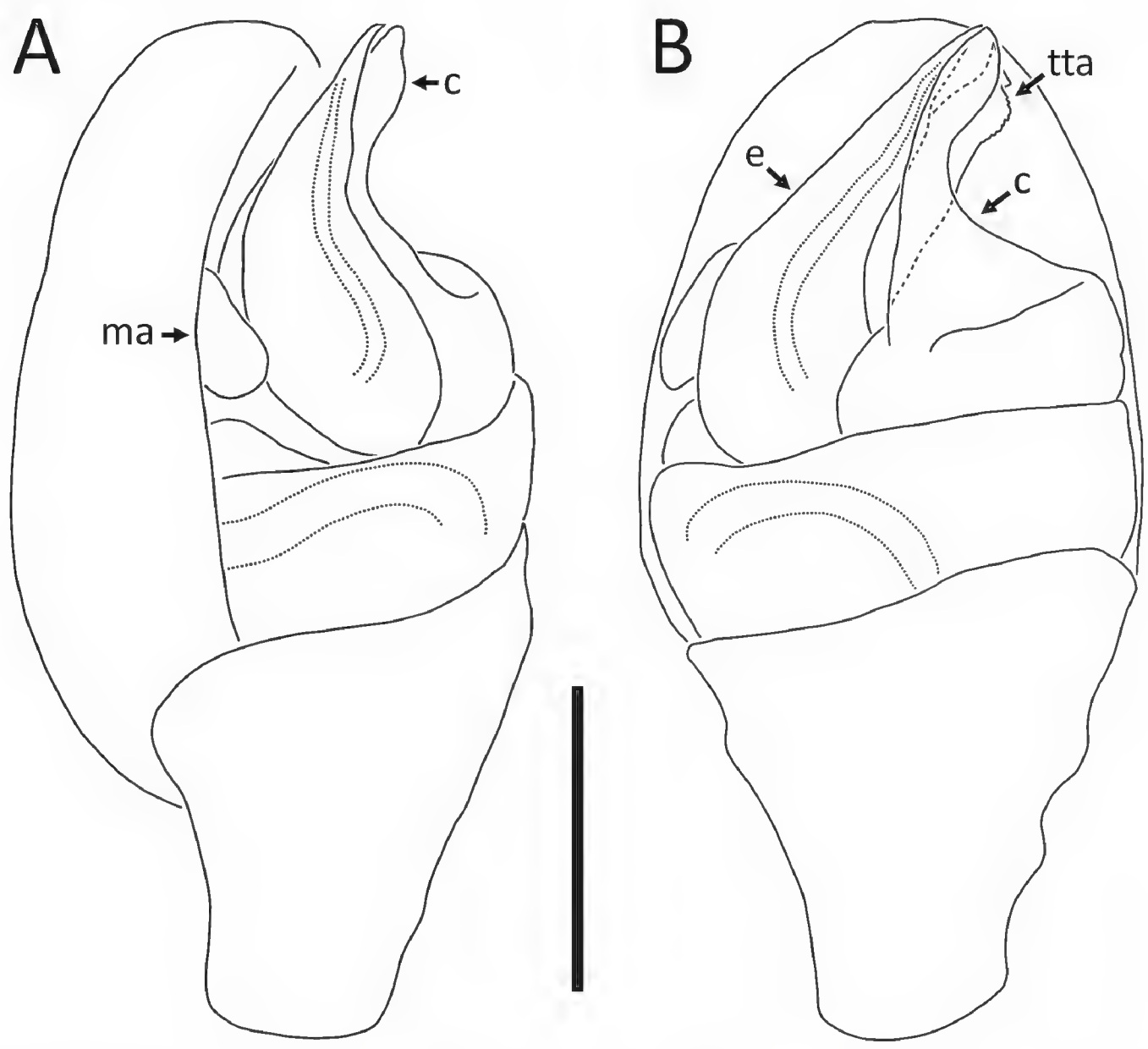

Figure 8. *Platnickina fritilla* Gao & Li, 2014, male (2013_HF3.2_AraTrid180N_001), left palp. **A.** Prolateral view; **B.** Ventral view. Abbreviations: c = conductor; e = embolus; ma = median apophysis; tta = theridiid tegular apophysis. Scale bars: 0.1 mm.

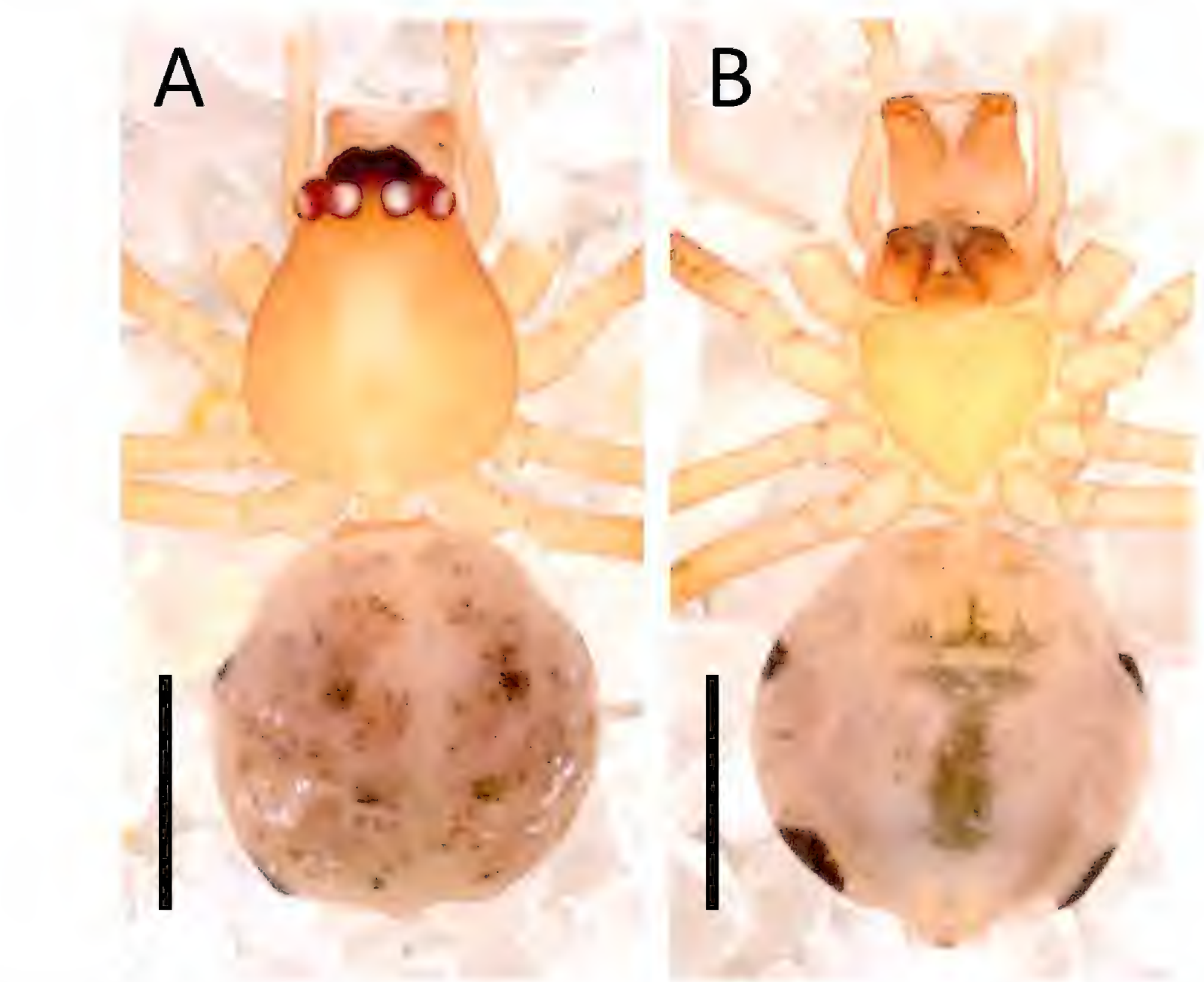

Figure 9. *Platnickina harapan* Dhiya'ulhaq, sp. nov., male paratype (2013_HJ2.1_AraTrid188N_001), habitus. **A.** Dorsal view; **B.** Ventral view. Scale bars: 0.5 mm.

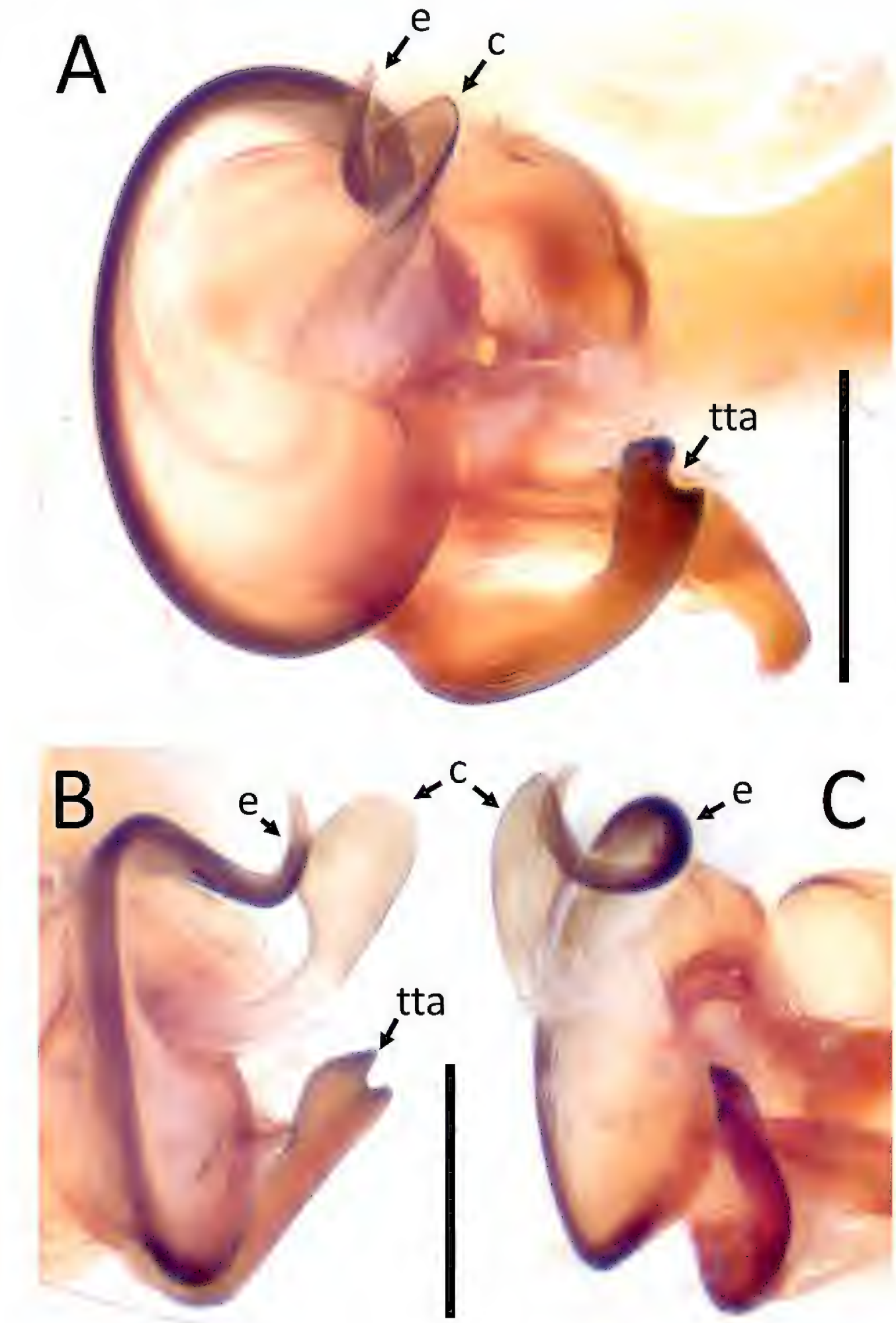

Figure 10. *Platnickina harapan* Dhiya'ulhaq, sp. nov., male paratype (2013_HJ2.1_AraTrid188N_001), expanded right palpal bulb, mirrored. **A.** Ventral view; **B.** Prolateral view; **C.** Retrolateral view. Scale bars: 0.1 mm.

Prosoma pear-shaped, yellow (Fig. 9A). Eyes ringed in red; AME larger than the other eyes; AER strongly recurved; PER straight (Fig. 9A). Chelicerae yellow (Fig. 9B). Maxillae basally yellow, distally brown (Fig. 9B). Labium fused with sternum, light-brown (Fig. 9B). Sternum triangular, yellow (Fig. 9B). Opisthosoma round, inconspicuously tuberculate, pinkish-yellow; dorsally with three pairs of faint black spots as well as numerous smaller black and white (guanine) ones; laterally with two pairs of large black spots (Fig. 9A, B). Legs yellow, with faint black ventral spots (Fig. 9A). Spinnerets yellow (Fig. 9B).

Palp (Figs 10, 12A–C): Tibia yellow. Cymbium oval, yellow. Conductor membranous, spatulate with rounded tip. TTA curved with notched tip. Embolus membranous, curved and wide, covering most of the bulb's ventral surface, with a distinctly dark outer margin, and bearing a ventrally protruding tip.

Female (holotype 2013_HF3.1_AraTrid188N_001; Figs 11, 12D, E). Total length 1.92. Prosoma length 0.71; width 0.62. Opisthosoma length 1.21; width 1.16. Diameter of eyes: AME 0.09; ALE 0.05; PLE 0.06; PME 0.07. Interdistances between eyes: AME–AME 0.08; AME–ALE 0.02; ALE–ALE 0.23; PME–PME 0.07; PME–PLE

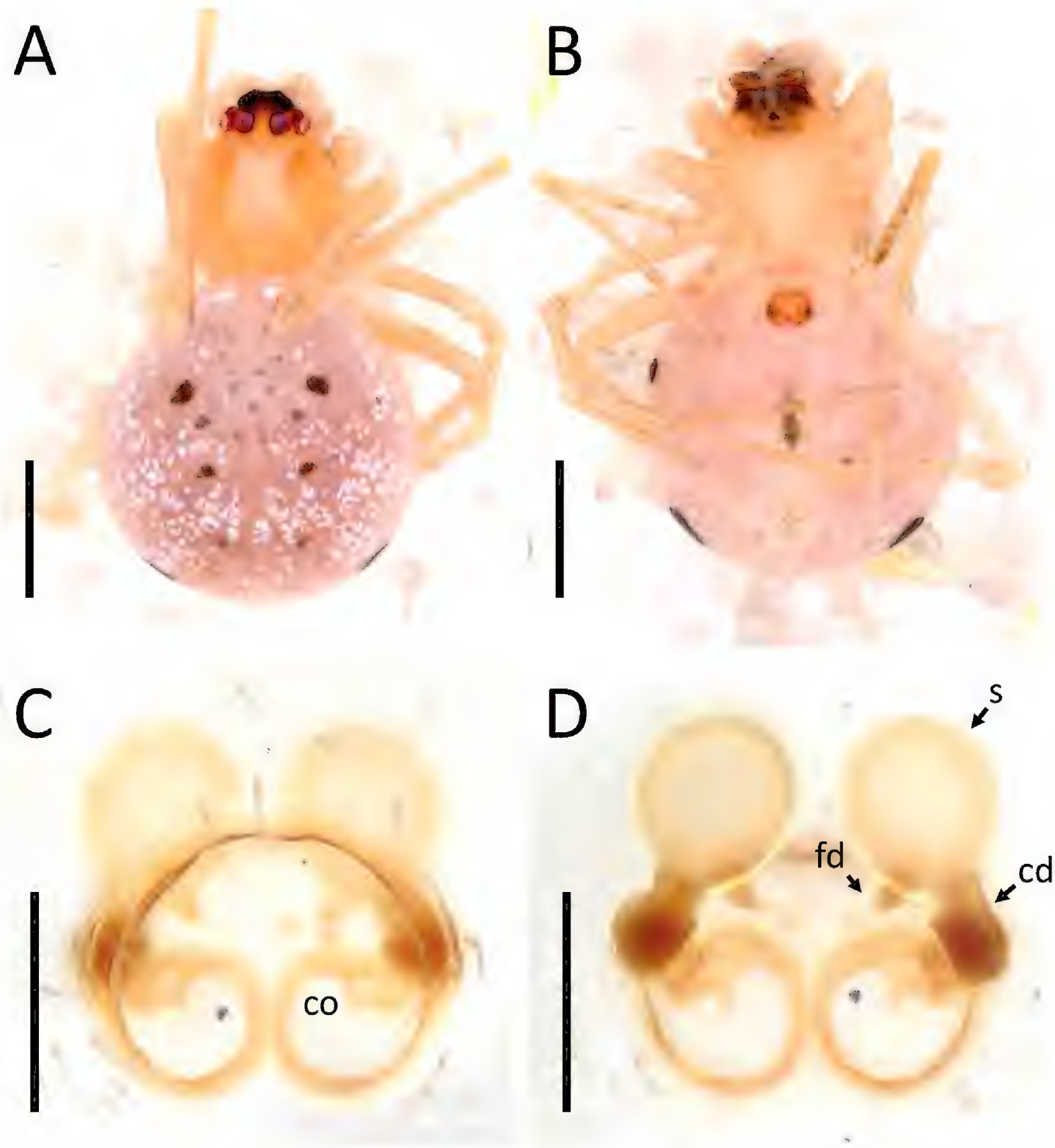

Figure 11. *Platnickina harapan* Dhiya'ulhaq, sp. nov., female holotype (2013_HF3.1_AraTrid188N_001). **A, B.** Habitus; **A.** Dorsal view; **B.** Ventral view; **C, D.** Epigynum, cleared; **C.** Ventral view; **D.** Dorsal view. Scale bars: 0.5 mm (**A, B**); 0.1 mm (**C, D**).

0.03; ALE–PLE 0.00; AME–PME 0.06; PLE–PLE 0.26. Leg measurements: leg I 4.60 (1.50, 0.20, 1.45, 1.07, 0.38); leg II 3.51 (1.10, 0.15, 1.10, 0.83, 0.33); leg III 2.17 (0.76, 0.14, 0.43, 0.55, 0.29); leg IV 2.36 (0.72, 0.17, 0.61, 0.57, 0.29). Habitus as in males, except for the small white (guanine) spots and paired black spots on the opisthosoma which are more distinct (Fig. 11A).

Epigynum (11C, D, 12 D, E): Atrium large, oval. Copulatory openings semicircular. Copulatory ducts roughly S-shaped with the distal part inflated and darkened. Spermathecae oval. Fertilization ducts S-shaped.

Etymology. The specific epithet refers to the type locality (Hutan Harapan, or Harapan Rainforest). It is also an Indonesian word meaning "hope", reflecting the authors' aspiration for the advancement of spider taxonomy in Indonesia. Noun in apposition.

Distribution. Indonesia (Sumatra: Jambi) (Fig. 15).

Platnickina xianfengensis (Zhu & Song, 1992)

Figs 13, 14

Theridion xianfengensis: Zhu & Song, 1992: 5, figs I, J (♂); Song and Li 1997: 403, fig. 5A, B (♂); Zhu 1998: 154, fig. 95 (♂♀); Yoshida, Tso and Severinghaus 2000: 127, figs 19, 20 (♂).

Theridion xianfengense: Song, Zhu & Chen, 1999: 148, fig. 82A, B, K, O (♂♀); Yin et al. 2012: 419, fig. 187 (♂♀); Zhang, Peng and Zhang 2022: 48, fig. 27 (♂♀).

Platnickina xianfengense: Huang et al. 2025: 145, figs 7, 8 (♂♀).

Materials examined. INDONESIA – Jambi Province • 1 ♂; Batang Hari, Bajubang, Sungkai; 01°51'36.5"S, 103°18'00.6"E; elev. 41 m; 2 Jun. 2013; J. Drescher leg.; canopy fogging in rubber plantation; GOET 2013_HR3.2_AraTrid109N_001 (to be transferred to MZB). • 1 ♂; Sarolangun, Pauh, Semaran; 02°05'30.5"S,

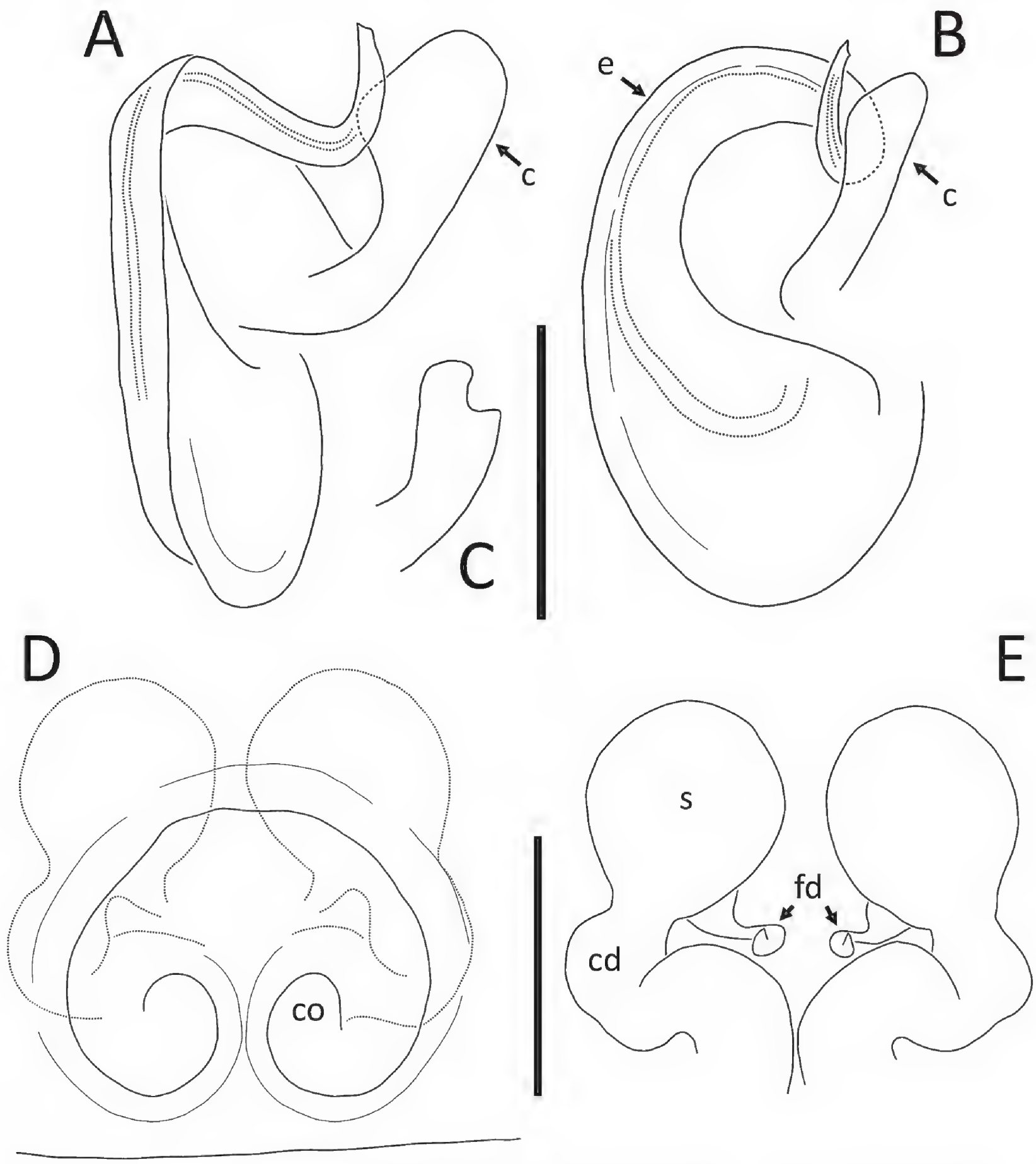

Figure 12. *Platnickina harapan* Dhiya'ulhaq, sp. nov. **A–C.** Male paratype (2013_HJ2.1_AraTrid188N_001), right palpal bulb, mirrored; **A.** Prolateral view; **B.** Ventral view; **C.** Theridiid tegular apophysis; **D, E.** Female holotype (2013_HF3.1_AraTrid188N_001), epigynum; **D.** Ventral view; **E.** Dorsal view. Abbreviations: c = conductor; cd = copulatory duct; co = copulatory opening; e = embolus; fd = fertilization duct; s = spermatheca. Scale bars: 0.1 mm.

102°48'08.4"E; elev. 75 m; 21 Jun. 2013; J. Drescher leg.; canopy fogging in rubber plantation; GOET 2013_BR1.2_AraTrid109N_001 (to be transferred to ZMH).

Diagnosis. Among the *maculata*-group, males of *P. xianfengensis* are most similar to *P. qionghaiensis* by the spoon-shaped conductor but can be distinguished by the light curvature of the embolus (Figs 13D, 14B) (vs strongly C-shaped embolus in *P. qionghaiensis*) (Zhu 1998, fig. 102D), medially constricted conductor (Fig. 13D, 14D) (vs. not constricted in *P. qionghaiensis*) (Zhu 1998, fig. 102D) and obtuse tip of TTA (Fig. 14B) (vs. acute in *P. qionghaiensis*) (Zhu 1998, fig. 102D). Females are most similar to *P. debu* sp. Nov. by the slightly bent copulatory ducts, but can be distinguished by the atrium slightly larger than spermathecae (Zhu 1998, fig. 95B, C) (vs distinctly smaller atrium in comparison to the spermathecae in *P. debu* Dhiya'ulhaq, sp. nov.) (Figs 5C, D, 6C, D).

Description. Male (2013_HR3.2_AraTrid109N_001; Figs 13, 14). Total length 1.91. Prosoma length 0.81; width 0.71. Opisthosoma length 1.10; width 0.77. Diameter of eyes: AME 0.11; ALE 0.06; PLE 0.06; PME 0.08. Interdistances between eyes: AME–AME 0.06; AME–ALE 0.02; ALE–ALE 0.28; PME–PME 0.07; PME–PLE 0.05; ALE–PLE 0.00; AME–PME 0.08; PLE–PLE 0.31. Leg measurements: leg I 6.55 (2.08, 0.25, 2.20, 1.53, 0.49); leg II 4.99 (1.61, 0.26, 1.55, 1.14, 0.43); leg III 2.87 (0.96, 0.19, 0.62, 0.73, 0.37); leg IV 2.97 (0.94, 0.20, 0.65, 0.82, 0.36). Prosoma pear shaped, yellow;

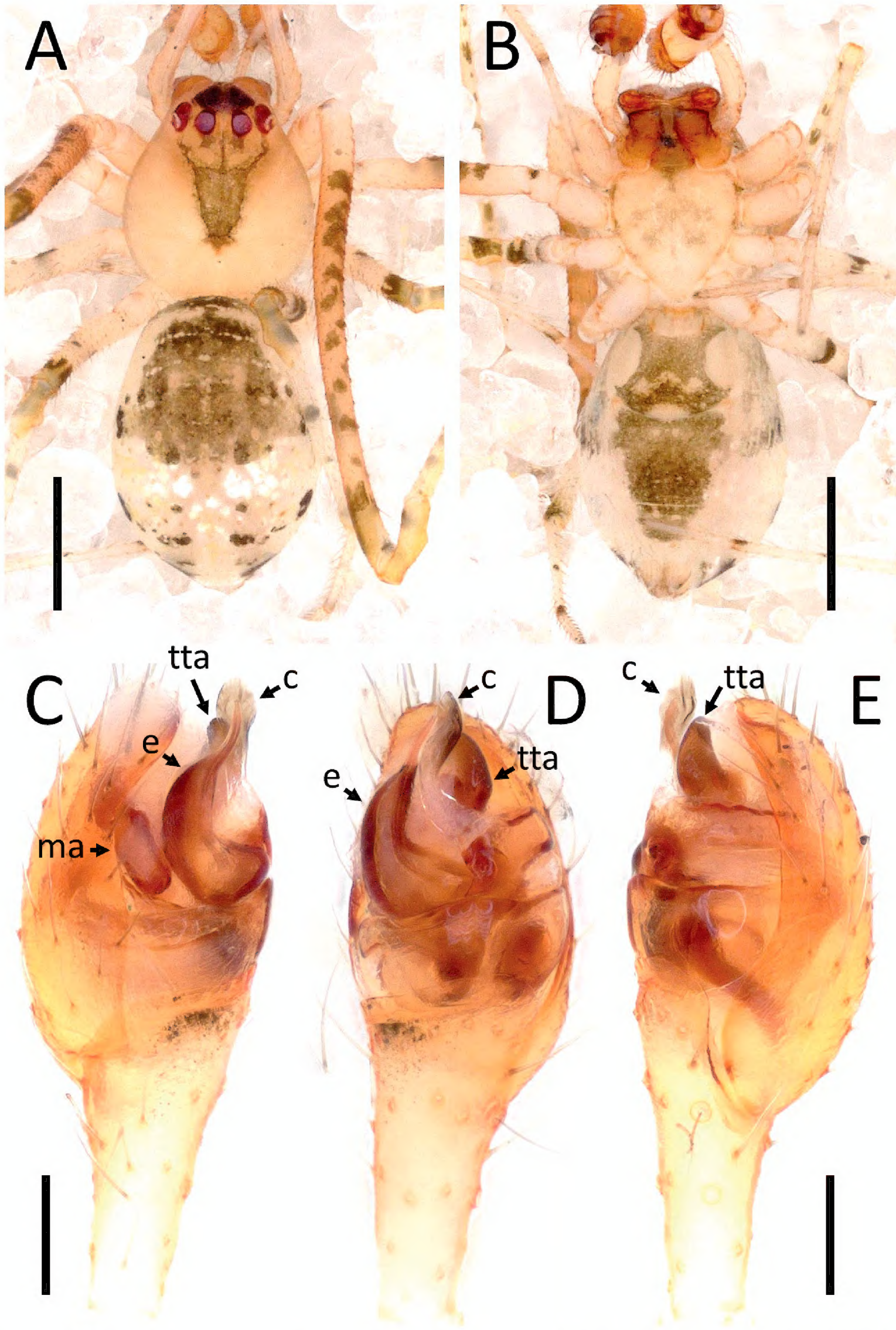

Figure 13. *Platnickina xianfengensis* (Zhu & Song, 1992), comb. nov., male (2013_HR3.2_AraTrid109N_001). **A, B.** Habitus; **A.** Dorsal view; **B.** Ventral view; **C–E.** Right palp, mirrored; **C.** Prolateral view; **D.** Ventral view; **E.** Retrolateral view. Scale bars: 0.5 mm (**A, B**); 0.1 mm (**C–E**).

dorsally with a triangular black mark (Fig. 13A). Eyes ringed in red; AME larger than the other eyes; AER strongly recurved; PER straight (Fig. 13A). Chelicerae brown. Maxillae brown (Fig. 13B). Labium fused with sternum, brown (Fig. 13B). Sternum triangular, yellow with faint black markings in the middle (Fig. 13B). Opisthosoma oval, inconspicuously tuberculate, yellow with mottled black and white spots; dorsally covered by a large black patch in the anterior half; ventrally covered by a large black patch (Fig. 13A). Legs yellow, with numerous distinct black patches (Fig. 13A). Spinnerets yellow (Fig. 13B).

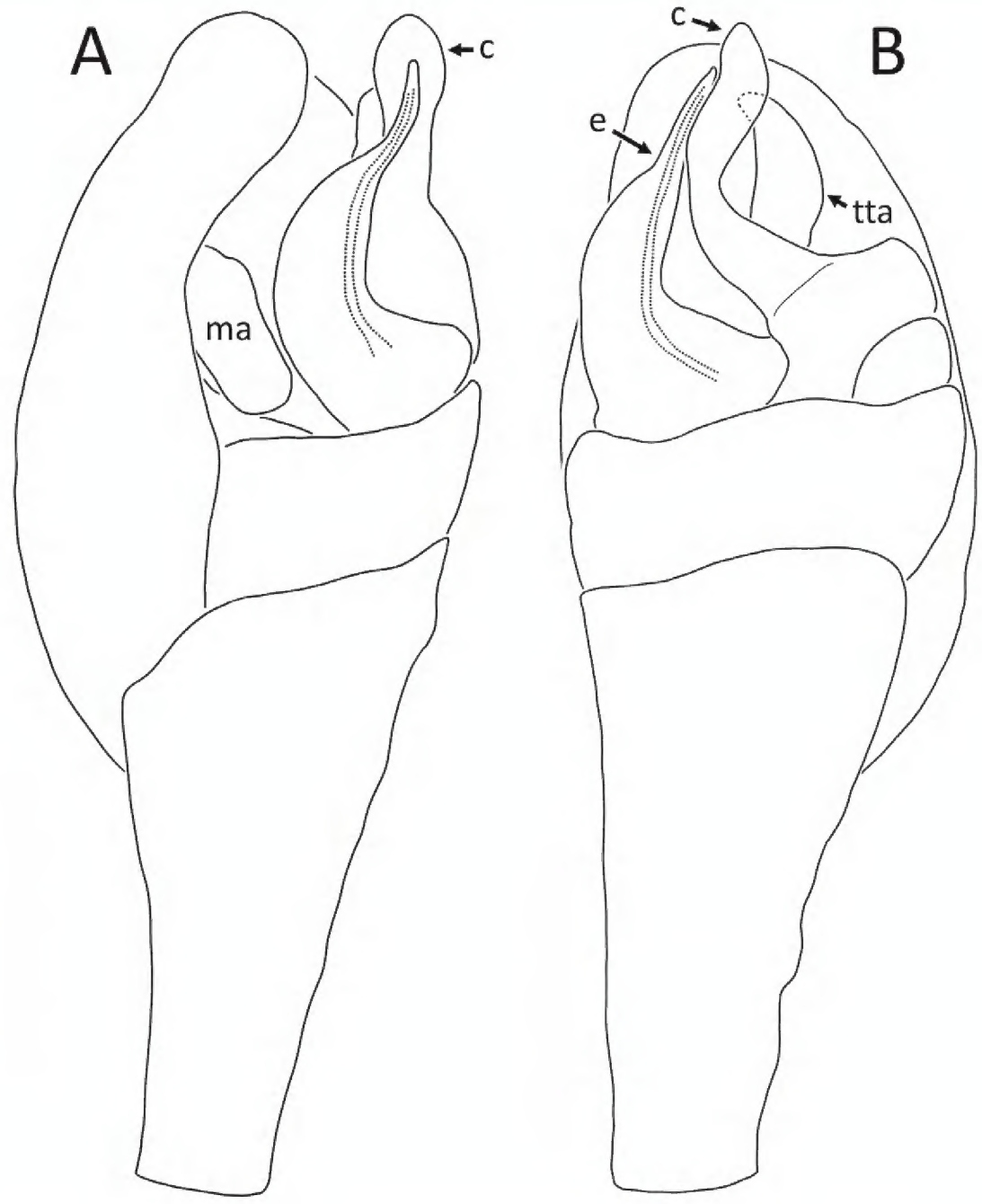

Figure 14. *Platnickina xianfengensis* (Zhu & Song, 1992), comb. nov., male (2013_HR3.2_AraTrid109N_001), right palp, mirrored. **A.** Prolateral view; **B.** Ventral view. Abbreviations: c = conductor; e = embolus; ma = median apophysis; tta = theridiid tegular apophysis. Scale bars: 0.1 mm.

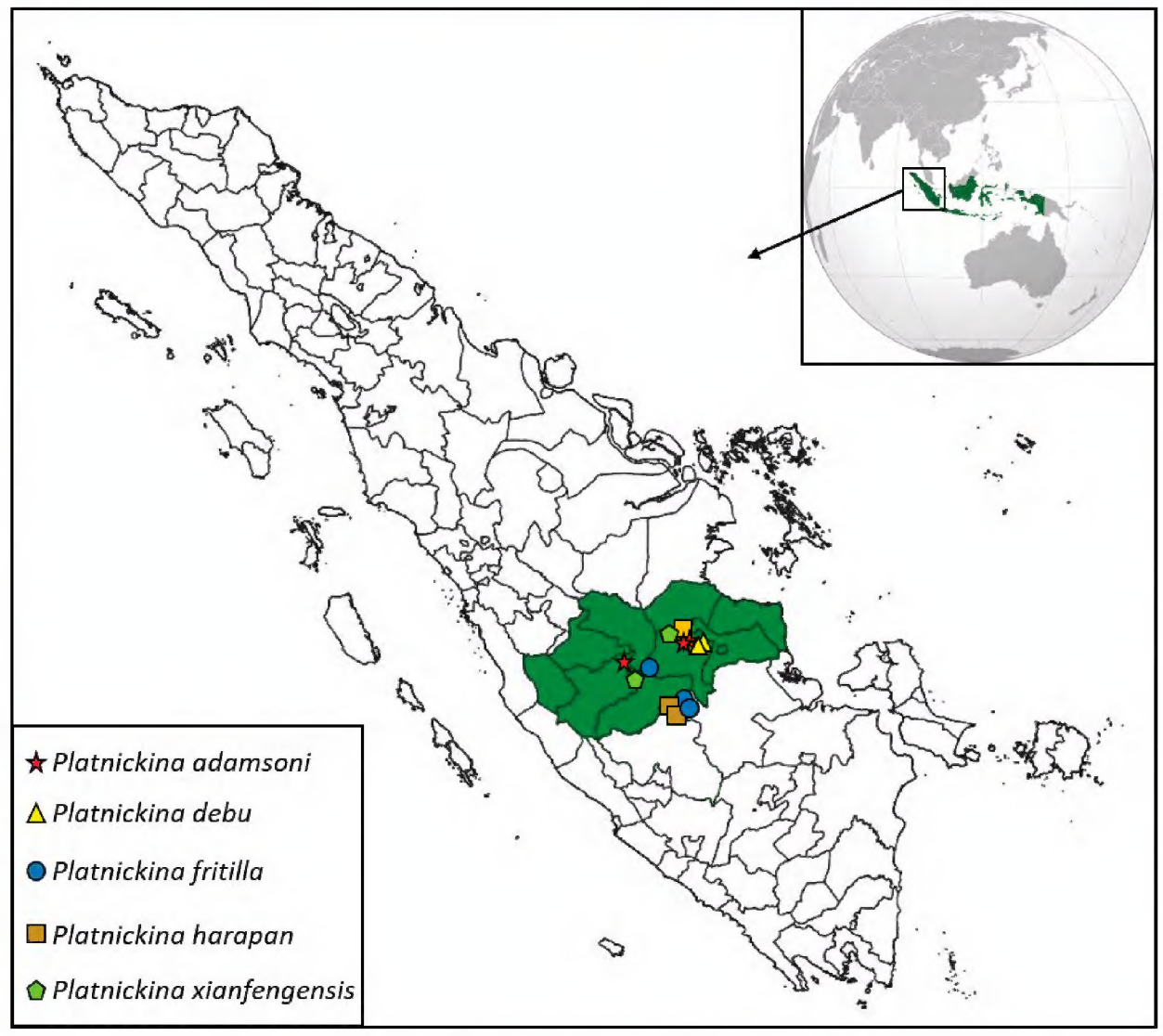

Figure 15. Distribution of five species of *Platnickina* Koçak & Kemal, 2008 in Jambi Province, Sumatra, Indonesia. Spiders presented in this study were collected by canopy fogging in 32 permanent research plots of the EFForTS project (Drescher et al. 2016). Green areas on the globe belong to Indonesia, and Jambi Province in Sumatra, respectively.

Palp (Figs 13C–E, 14): Cymbium oval, yellow. Conductor membranous, roughly S-shaped, medially constricted with spatulate tip. TTA claw-shaped with obtuse and slightly curved tip. Embolus curved, claw-shaped, approximately three-quarters the length of bulb with filiform tip; and a membranous mid-part with sclerotized margins.

Distribution. China; Taiwan; Indonesia (Sumatra: Jambi [new record, Fig. 15]).

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